



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,773	12/27/2001	Matthew Rozek	088305-0140	9808
22428	7590	10/27/2004		
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER RIES, LAURIE ANNE	
			ART UNIT 2176	PAPER NUMBER

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/026,773	ROZEK ET AL.	
	Examiner	Art Unit	
	Laurie Ries	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) * | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/27/01</u> . o | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. (Page 6, paragraph 0032, line 3). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-16, 20-23, 27-36, 40-42, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eck (U.S. Publication 2002/0129059 A1) in view of Cheng-Hung (U.S. Patent 6,397,232 B1).

As per claims 1 and 21, Eck discloses a computer readable medium on a computer system and a method for translating between an XML-type document and a first type of document, in the form of a flat file, including generating a data model for the XML-type document based on an XML data source (See Eck, Page 4, paragraph 0075), and generating a data model for the first type of document based on the XML data source (See Eck, Page 4, paragraph 0075). Eck does not disclose expressly that

Art Unit: 2176

mapping rules are created between the data model for the XML-type document and the data model for the first type of document. Cheng-Hung discloses the creation of mapping rules between an XML type document and a first type of document. (See Cheng-Hung, Figure 2, element 38, and Column 3, lines 31-46). Eck and Cheng-Hung are analogous art because they are from the same field of endeavor of translating documents from one format to another. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the mapping rules of Cheng-Hung with the file translation method of Eck. The motivation for doing so would have been to provide for a set of rules that follow a standard format for both files. (See Cheng-Hung, Column 3, lines 42-46). Therefore, it would have been obvious to combine Cheng-Hung with Eck for the benefit of providing for a standard set of rules for both files to obtain the invention as specified in claims 1 and 21.

As per claims 2 and 22, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses creating an executable file to effect the translation between the XML-type document and the first type of document based on the data model for the XML-type document, the data model for the first type of document, and the mapping rules, and running the executable file to translate between the XML-type document and the first type of document. (See Eck, Page 1, paragraph 0003).

As per claims 3 and 23, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses translating test data based on the data model for the XML-type document, the data model for the first type of document, and

Art Unit: 2176

the mapping rules (See Eck, Page 1, paragraph 0005), and verifying the propriety of the data model for the XML-type document, the data model for the first type of document and the mapping rules based on the result of the translation (See Eck, Page 6-7, paragraphs 0117-0132).

As per claims 7 and 27, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses receiving an indication of the direction of the translation (See Eck, Page 4, paragraph 0065, and Figure 5).

As per claims 8 and 28, Eck and Cheng-Hung disclose the limitations of claim 1 as described above. Eck also discloses including receiving an indication of the identity of the XML data source (See Eck, Figure 5).

As per claims 9 and 29, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses that the XML data source is an XML Schema Definition (XSD) (See Eck, Page 1, paragraph 0019).

As per claims 10 and 30, Eck and Cheng-Hung disclose the limitations of claims 9 and 29 as described above. Eck also discloses providing a model for numerics in the XSD (See Eck, Page 6, paragraph 0117).

As per claims 11 and 31, Eck and Cheng-Hung disclose the limitations of claims 9 and 29 as described above. Eck also discloses providing a model for grouping and pattern definitions in the XSD (See Eck, Page 5, paragraphs 0088 and 0090).

As per claims 12 and 32, Eck and Cheng-Hung disclose the limitations of claims 9 and 29 as described above. Eck also discloses providing a model for field lengths

Art Unit: 2176

(See Eck, Page 5, paragraph 0087) and value ranges (See Eck, Page 4, paragraph 0076).

As per claims 13 and 33, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses creating a map component file which identifies the data models for the XML-type document and the first type of document (See Eck, Page 6, paragraphs 0113-0114), and where running the executable file includes referencing the map component file to perform the translation (See Eck, Page 6, paragraph 0115).

As per claims 14 and 34, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses receiving an indication of the identity of the XML-type document to be translated (See Eck, Figure 5).

As per claims 15 and 35, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses validating that the translation between the XML-type document and the first type of document is accurate (See Eck, Pages 6-7, paragraphs 0117-0132).

As per claims 16 and 36, Eck and Cheng-Hung disclose the limitations of claims 15 and 35 as described above. Eck also discloses receiving an indication of how to perform the validation (See Eck, Page 7, paragraph 0123).

As per claims 20 and 40, Eck and Cheng-Hung disclose the limitations of claims 15 and 35 as described above. Eck also discloses that the validation also includes determining that elements in the XML-type document are in the correct order (See Eck, Page 6, paragraph 0113), determining that the XML-type document includes any

Art Unit: 2176

specified mandatory elements (See Eck, Page 7, paragraph 0131), determining if data types in the XML-type document are proper (See Eck, Page 7, paragraph 0123), and determining if the format of a value in a field in the XML-type document is proper (See Eck, Page 7, paragraph 0128).

As per claims 41 and 45, Eck and Cheng-Hung disclose the limitations of claim 1 as described above. Eck also discloses a computer system for translating between an XML-type document and a first type of document including a processor, and a memory, coupled to the processor, including a number of instructions executed by the processor configured to perform the functionality disclosed in claim 1. (See Eck, Figure 2, and Page 2, paragraph 0037).

Claims 42 and 46 are rejected on the same basis as claim 2.

Claims 17-19 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eck (U.S. Publication 2002/0129059 A1) in view of Cheng-Hung (U.S. Patent 6,397,232 B1) and in further view of the Microsoft Computer Dictionary, Fifth Edition (used for definition purposes).

As per claims 17 and 37, Eck and Cheng-Hung disclose the limitations of claims 15 and 35 as described above. Eck also discloses that the validation includes checking that the XML-type document is well-formed. (See Eck, Page 7, paragraph 0123). Note that the definition of well-formed is "an XML or HTML document that follows all the rules of syntax outlined in the protocol's specifications" (See Microsoft Computer Dictionary, Fifth Edition).

As per claims 18 and 38, Eck and Cheng-Hung disclose the limitations of claims 17 and 37 as described above. Eck also discloses that the checking includes determining that each element in the XML-type document has start and end tags with the same label (See Eck, Page 7, paragraphs 0126-0127).

As per claims 19 and 39, Eck and Cheng-Hung disclose the limitations of claims 17 and 37 as described above. Eck also discloses that the checking includes verifying that the XML-type document is well-formed based upon the data model for the XML-type document (See Eck, Page 7, paragraph 0123). Note that the definition of well-formed is "an XML or HTML document that follows all the rules of syntax outlined in the protocol's specifications" (See Microsoft Computer Dictionary, Fifth Edition).

Claims 4, 24, 43, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eck (U.S. Publication 2002/0129059 A1) in view of Cheng-Hung (U.S. Patent 6,397,232 B1) as applied to claims 1, 21, and 41 above, and further in view of Webber (U.S. Patent 6,418,400 B1).

As per claims 4 and 24, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck also discloses modifying the data model for the first type of document to conform to a format associated with the first type of document (See Eck, Page 6, paragraph 0111). Eck and Cheng-Hung do not disclose expressly modifying the mapping rules based on the modification of the data for the first type of document. Webber discloses modifying mapping rules using a Modify mode (See Webber, Column 7, lines 62-67, and Column 8, lines 1-6). Eck, Cheng-Hung and

Art Unit: 2176

Webber are analogous art because they are from the same field of endeavor of mapping electronic data. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the modification of mapping rules of Webber with the system and method of Eck and Cheng-Hung. The motivation for doing so would have been to allow the user to create rules used for data validation (See Webber, Column 8, lines 7-9). Therefore it would have been obvious to combine Webber with Eck and Cheng-Hung for the benefit of allowing the modification of mapping rules for testing purposes to obtain the invention as specified in claims 4 and 24.

Claims 43 and 47 are rejected on the same basis as claim 4.

Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eck (U.S. Publication 2002/0129059 A1) in view of Cheng-Hung (U.S. Patent 6,397,232 B1) and Webber (U.S. Patent 6,418,400 B1) as applied to claims 1 and 21 above, and further in view of Huang (U.S. Publication 2002/0147748 A1).

As per claims 5 and 25, Eck, Cheng-Hung, and Webber disclose the limitations of claims 4 and 24 as described above. Eck, Cheng-Hung and Webber do not disclose expressly adjusting the data model for the first type of document to conform with an import utility of an application associated with the first type of document. Huang discloses using an import utility to edit associated meta-tag information for a file. (See Huang, Page 5, paragraph 0069). Eck, Cheng-Hung, Webber and Huang are analogous art because they are from the same field of endeavor of translating electronic

Art Unit: 2176

data. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the use of an import utility program of Huang with the system and method of Eck, Cheng-Hung and Webber. The motivation for doing so would have been to allow for simple creation of a file (See Huang, Page 5, paragraph 0069).

Therefore, it would have been obvious to combine Huang with Eck, Cheng-Hung, and Webber for the benefit of easily creating the file to obtain the invention as specified in claims 5 and 25.

Claims 6, 26, 44, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eck (U.S. Publication 2002/0129059 A1) in view of Cheng-Hung (U.S. Patent 6,397,232 B1) as applied to claims 1, 21, 41, and 45 above, and further in view of De La Huerga (U.S. Patent 6,516,321 B1).

As per claims 6 and 26, Eck and Cheng-Hung disclose the limitations of claims 1 and 21 as described above. Eck and Cheng-Hung do not disclose expressly omitting formatting that is present in the data model for the XML-type document. De La Huerga discloses removing all XML tags from a document. (See De La Huerga, Column 27, line 21). Eck, Cheng-Hung, and De La Huerga are analogous art because they are from the same field of endeavor of processing electronic data. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the omission of XML tags of De La Huerga with the system and method of Eck and Cheng-Hung. The motivation for doing so would have been to ensure that tag enabled applications do not reference incorrect information from the data (See De La Huerga,

Art Unit: 2176

Column 27, lines 26-27). Therefore, it would have been obvious to combine De La Huerga with Eck and Cheng-Hung for the benefit of providing accurate data to obtain the invention as specified in claims 6 and 26.

Claims 44 and 48 are rejected on the same basis as claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Helgeson (U.S. Patent 6,643,652 B2) discloses a method and apparatus for managing data exchange among systems in a network.
- Binding (U.S. Publication 2002/0100027 A1) discloses a method of externalizing relational and ASN.1-formatted data into XML format.
- Delcambre (U.S. Publication 2002/0059556 A1) discloses a Uni-level description of a computer information and transformation of computer information between representation schemes.
- Fernandez (U.S. Patent 6,604,100 B1) discloses a method for converting relational data into a structured document.
- Warshavsky (U.S. Patent 6,732,095 B1) discloses a method and apparatus for mapping between XML and relational representations.
- Meltzer (U.S. Patent 6,226,675 B1) discloses a participant server which processes documents for commerce in trading partner networks.
- Imamura et al disclose mapping between ASN.1 and XML.

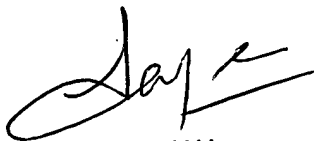
Art Unit: 2176

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. The examiner can normally be reached on Monday-Friday from 7:00am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached at (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR



SANJIV SHAH
PRIMARY EXAMINER